

**Site Sampling Plan/Health & Safety Plan**  
**Chemical Recycling, Inc., Wylie, Collin County, Texas**

Initial Date: 10/20/99

Revised Date: 10/26/99

Sample Matrix	Sample ID	Sample Location	Rationale
Ground Water Samples	GW-01	<b>MW-01</b> located in the northwest portion of the site at unaffected up-gradient location Well depth = 40 0', screened interval (SI) = 20'-40'	Obtain an up-gradient <b>background well sample</b> from the shallow alluvial aquifer for attribution of site contaminants
	GW-02	Quality Assurance/Quality Control (QA/QC).	<b>Duplicate</b> ground water sample collected at the same location as GW-01
	GW-03	<b>MW-14</b> located between diked drum storage area and tank farm Well depth = 30 0', SI = 15'-30'	Assess ground water contamination that may be migrating to the shallow alluvial aquifer
	GW-04	<b>MW-09</b> located southeast of the former solvent process area Well depth = 30 0', SI = 15'-30'	Assess ground water contamination that may be migrating to the shallow alluvial aquifer
	GW-05	<b>MW-04</b> located in SE corner of the diked drum storage area Well depth = 10 0', SI = 3'-10'	Assess ground water contamination that may be migrating to the shallow alluvial aquifer
	GW-06	Quality Assurance/Quality Control (QA/QC)	<b>Field blank</b> for monitoring wells/surface water (VOCs and metals/cyanide analysis)
Surface Water	SW-01	Unaffected surface water sample collected from the <b>intermittent creek</b> located east of the site	Determine naturally occurring <b>background levels</b> in SW located up-gradient from site
	SW-02	Surface water sample collected from the <b>fresh water pond</b> located in east central portion of site	Determine contaminants that may have migrated to the on-site pond from site sources
	SW-03	Surface water sample collected from the <b>intermittent creek</b> near the Kirby Street bridge	Determine contaminants that may have migrated to the creek from on-site sources
	SW-04	Quality Assurance/Quality Control (QA/QC).	<b>Duplicate</b> surface water sample collected at the same location as SW-03
Soil Samples	SO-01	Unaffected up-gradient composite surface soil sample collected in native soils at depth 0"-6"	Off-site <b>background soil</b> sample collected for attribution of site contaminants
	SO-02	Unaffected up-gradient composite surface soil sample collected in native soils at depth 0"-6"	Off-site <b>background soil</b> sample collected for attribution of site contaminants
	SO-03	Unaffected up-gradient composite surface soil sample collected in native soils at depth 0"-6"	Off-site <b>background soil</b> sample collected for attribution of site contaminants
	SO-04	Composite soil sample collected from <b>land farm area/waste drum storage area</b> at depth 0"-6".	Assess source contamination migrating to the surface water or ground water pathways
	SO-05	Composite soil sample collected from <b>process area/waste drum storage area</b> at depth 0"-6"	Assess source contamination migrating to the surface water or ground water pathways
	SO-06	Quality Assurance/Quality Control (QA/QC)	<b>Duplicate</b> soil sample collected at the same location as SO-05
	SO-07	Composite soil sample collected from <b>still bottom disposal area</b> located in former tank farm area	Assess source contamination migrating to the surface water or ground water pathways



Sample Matrix	Sample ID	Sample Location	Rationale
Sediment Samples	SE-01	Sediment sample collected from an unaffected up-gradient portion of the creek located east of site	Obtain <b>background sediment</b> sample for attribution of site contaminants
	SE-02	Sediment sample collected from an unaffected up-gradient portion of the creek located east of site	Obtain <b>background sediment</b> sample for attribution of site contaminants
	SE-03	Sediment sample collected from an unaffected up-gradient portion of the creek located east of site	Obtain <b>background sediment</b> sample for attribution of site contaminants
	SE-04	Sediment sample collected along the <b>creek bed</b> where seeping GW may be entering SW pathway	Document the release of contaminants from ground water to the surface water pathway
	SE-05	Quality Assurance/Quality Control (QA/QC)	<b>Duplicate</b> sediment sample of SE-04
	SE-06	Sediment sample collected from the <b>on-site fresh water pond</b> along SE bank near overflow area	Determine contaminants that may have migrated to the on-site pond from site sources
	SE-07	Sediment sample collected from the <b>bar ditch</b> along the north side of Kirby Street	Determine naturally occurring <b>background levels</b> in sediments at up-gradient location
	SE-08	Sediment sample collected from the <b>bar ditch</b> along Kirby Street near the Kirby Street bridge	Document the release of site contaminants to the surface water pathway
	SE-09	Sediment sample collected within <b>wetlands</b> located 0.75 mi S of site along the SW pathway	Document release of contaminants within the surface water migratory pathway
	SE-10	Sediment sample collected <b>down gradient</b> from the PPE at Muddy Creek	Document release of contaminants to the nearest perennial stream
	SE-11	Sediment sample collected at the <b>PPE</b> at Muddy Creek	Document release of contaminants to the nearest perennial stream
	SE-12	Quality Assurance/Quality Control (QA/QC)	<b>Duplicate</b> sediment sample collected at the same location as SE-11
	SE-13	Sediment sample collected <b>up-gradient</b> from the PPE at Muddy Creek	Obtain <b>up-gradient sediment</b> sample for attribution of site contaminants

**Site Status/Background** - The Chemical Recycling, Inc. (CRI) site is currently an **inactive** solvent reprocessing facility that recycled depleted industrial solvents and paint thinners (trichloroethylene (TCE), 1-1-1 trichloroethane, methylene chloride, xylene, toluene, methyl ethyl ketone (MEK) and petroleum naphtha), paint pigment residues (containing titanium, zinc and iron oxides, alkyds, vinyls, epoxies, acrylics and lacquers) and depleted inks (containing lead, zinc and chromium) using a steam distillation process. Suppliers repurchased the recycled material for use as raw materials or for fuel blending. The materials were transported using a company-owned flatbed truck or 2,000-gallon tank truck and delivered to the site for reprocessing. The recovered solvents were stored in 13 above ground storage tanks (ASTs) ranging from 2,000-8,000 gallons located within an unlined 3'-high earth-bermed tank farm, in an on-site bulk transport trailer (2,000 gallon) and in various other storage tanks for a total of eighteen (18) on-site product storage tanks. Process residuals (still bottoms/sludges) were placed in 55-gallon drums and stored in numerous unlined waste drum storage areas located throughout site for subsequent disposition. Empty process drums noted leaking residual materials were stored at various other on-site locations. An inventory on 4/22/80 revealed a total of approximately 1,500 drums stored on-site with some having been there for nine years. Distillation steam condensation was collected in two open sub-surface concrete sumps (later defined as tanks), neutralized with lime and discharged to the city sanitary sewer. Boiler blowdown

was discharged directly to surface soils. It was reported still bottoms were used to coat surface roads throughout the site before 1980 and were tilled into soils (land farmed) in the northwest portion of the property in 1979. In addition, still bottoms and sludge wastes were buried in six (6) identified on-site landfill areas (listed as B-01 thru B-06) and in several off-site locations (i.e., the K. C. Swayze property formerly owned and used by Electro-Extraction Corporation and the City of Wylie municipal landfill) from 1978 to 1986 as reported by a former employee.

**Regulatory Compliance History** - CRI began operations in 8/75 after relocating from its 1400 Northwest Highway, Dallas, TX facility that was closed in 10/75. From 1979 to 12/88, the company was repeatedly cited by the TWQB/TDWR/TWC for numerous violations of waste management regulations and subsequently referred to the State Attorney General for repeated non-compliance. An EPA PA/SI was completed on 3/07/80 and a 2/16/84 EPA TAT SI identified improper waste management practices (land-farmed sludges, leaking drums/tanks and no runoff control) substantiated by on-site sampling. After receipt of two Agreed Temporary Injunctions dated 7/21/87 and 4/06/88 and increasing cleanup costs, the company filed for Chapter 7 bankruptcy on 3/27/90 and ceased operations effective 2/15/89. After a TNRCC referral to the EPA on 1/01/89, a total of 44 drums of hazardous waste and all abandoned equipment, tanks and containers were removed on 5/24/89 during an emergency removal action and a PRP program was initiated. Identified "respondents" were directed to delineate and remediate remaining site contamination as outlined in an EPA 8/04/89 Administrative Order on Consent/SOW under administration and oversight by the EPA. Based on a 4/15/93 Region 4 site inspection noting no activity at the site, the TNRCC I&HW Division determined enforcement had been exhausted and on 8/06/93 referred the site to the State Superfund Program for further action. On 2/25/94, a site screening determined the site eligible as a candidate State SF site requiring further data/information to complete a HRS evaluation.

**Current Site Conditions** - The site (5-acres) was leased by CRI beginning in 10/72, then purchased from the Lease Back Corp. on 4/18/75. The facility had been formerly leased from 4/18/71 by the Structural Marble Corporation, a porcelain product manufacturing company. Prior to 1971, the site was undeveloped and reportedly used as a municipal landfill. The site is currently **abandoned** with the warehouse/office/laboratory as the **only remaining structure**. There are **no on-site residents** or **on-site workers**. Most of the site is vegetated with native grasses, trees and shrubs that remain from original landscaping. There is a natural **on-site pond** wet most of the year now overgrown with reeds, which is the **nearest body of water**. A portion of the east perimeter fence was removed sometime before 1995. During a recent 10/14/99 site reconnaissance inspection, the gate was noted open and the overhead entrance door to the warehouse removed thereby permitting **unrestricted site access**. In addition, the City of Wylie had recently installed an underground sewer line just east of the site significantly disturbing soils along the site's eastern perimeter. There were 13 on-site monitoring wells (1 noted damaged) identified during the 10/14/99 site inspection.

**Surrounding Land Use** - The site is located within the city limits of Wylie, TX (pop. 8,714 -1990 Census) in a mixed urban/industrial area in the SW portion of the city. The geographic coordinates are Lat. 33° 32' 55" N; Long 96° 30' 35" W. The site is located north of and along SH 544 (Kirby Street) and the former city vehicle maintenance yard is located to the east. The BN/AT&SF railroad line is located north of the site and the **nearest business** is a warehouse with a fenced and gated access road defining the western boundary. The **nearest residence** is located approximately 0.5 mi SE of the site. The **nearest wells** are two (2) privately-owned irrigation wells located 0.9 mi NE of the site within the city limits that obtain water from a **shallow unconfined alluvial aquifer**. **Depth to ground water** is reported approximately 20' to 70' with most wells developed thru hardened clay layers overlying thin lateral deposits of mixed alluvial sands and gravel. **Static water levels** vary seasonally with some wells dry during low rainfall periods. The city and surrounding areas are supplied **public drinking water** almost entirely by **surface water** obtained from an up-gradient intake located 3.1 mi to the north at Lake Lavon with well water development limited in the local area. There were **no public supply or domestic drinking water wells** identified within a 1-mile radius of the site. There were four (4) ground water monitoring wells identified 0.1 to 0.25 mi SW of the site installed during January 1988 GW investigations conducted at the former Electro-Extraction Corporation site. **Surface water** from the site flows west to east across natural sloping terrain and man-made channels collecting in a bar ditch located north along Kirby Street. The ditch drains 200' east to an unnamed intermittent tributary of Muddy Creek just above the Kirby St. bridge flowing south approximately 8,500' (1.60 mi.) intersecting Muddy Creek at the PPE and entering Lake Ray Hubbard 6.1 mi.

downstream Potential **surface water targets** include approximately **5 acres of wetland** located 0.75 mi along the overland flow segment and a **public supply drinking water intake** located on Lake Ray Hubbard (Trinity River Segment 0820) at 14.3 mi serving approximately **5 million people** in the greater Dallas-Ft. Worth metroplex. Lake Ray Hubbard is listed as a contact recreation-use, high aquatic life habitat and used as a public drinking water supply source

**Sampling Rationale** - The **most likely pathway** for site evaluation is the ground water to surface water pathway resulting from recent soil excavations along the site's east perimeter that could allow organic contaminated ground water to seep/discharge to the adjacent intermittent creek The **most likely targets** are the on-site wetlands (on-site pond), the downstream wetlands located 0.75 mi south of the site and the public supply drinking water intake located 14.3 mi downstream. from the PPE

**Site Specific Health & Safety Plan** - Contaminants of Concern. lead, copper, <sup>chromium</sup>iron, nickel, zinc and organics (trichloroethylene (TCE), 1,1,1 trichloroethane, methylene chloride, xylene, toluene and methyl ethyl ketone (MEK) identified from abandoned, spilled or landfarmed hazardous wastes remaining at the site or in ground water. Physical Hzds rocks, tree limbs, slippery rocks near creek Chem Hzds dilute nitric acid and sodium hydroxide (water sample preservatives). PPE Level D (mod), i.e., gloves, steel-toed boots, coveralls and safety glasses Nearest  
Emergency Hospital Directions Telephone  
Admissions Office Emergency Room